

Title (en)
QUASICRYSTALLINE MATERIAL AND SEMICONDUCTOR DEVICE APPLYING THE SAME

Title (de)
QUASIKRISTALLINES MATERIAL UND HALBLEITERBAUELEMENT DAMIT

Title (fr)
MATÉRIAU QUASICRYSTALLIN ET DISPOSITIF SEMI-CONDUCTEUR L'UTILISANT

Publication
EP 3734677 A1 20201104 (EN)

Application
EP 20164805 A 20200323

Priority
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Abstract (en)
A quasicrystalline material and a semiconductor device to which the quasicrystalline material is applied are disclosed. A quasicrystalline material is based on a quasicrystalline element having one or more axis of symmetry (e.g., a 2-fold axis, a 3-fold axis, a 5-fold axis, or a higher fold axes of symmetry). The quasicrystalline material is capable of phase changes between a quasicrystalline phase and an approximant crystalline phase having a further regular atom arrangement than the quasicrystalline phase. The quasicrystalline material that may be used as a phase change material and may be applied to a phase change layer of a semiconductor device.

IPC 8 full level
H01L 45/00 (2006.01)

CPC (source: CN EP KR US)
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Citation (search report)

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